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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,781	01/23/2002	Clint D. Kolda	376.171	6251

7590 03/08/2005

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EXAMINER

MATHEW, FENN C

ART UNIT	PAPER NUMBER
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3764

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/054,781	Applicant(s) KOLDA ET AL.	
	Examiner Fenn C Mathew	Art Unit 3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-21 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8,10-14,16-21 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**JEROME W. DONNELLY**  
**PRIMARY EXAMINER**

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/26/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4, 8, 10-14, 16-21, 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (U.S. 6,736,761) in view of Liou (U.S. 6,273,845).

Referring to claim 1, Huang teaches a stationary frame configured to support a driven wheel of a bicycle and a resistance unit mounted to the frame, comprising a housing (13), a roller rotatably mounted to the housing wherein the roller is configured to engage the driven wheel of the bicycle for rotation in response to rotation of the driven wheel, a stationary electrically conductive material (37) interconnected with the housing capable of providing eddy current resistance in conjunction with a magnetic resistance device. Huang further teaches a magnetic resistance arrangement carried by a rotatable member. Huang fails to teach the specific magnetic resistance arrangement. Liou teaches an alternative magnetic resistance arrangement including a flywheel (rotatable member) including magnets that radially change position depending on the speed of a rotatable member, thereby giving way to a variable non-linear relationship between the speed of the rotatable member and the resistance provided in response to the speed of rotation of the rotatable member. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the load applying device as

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taught by Liou for the resistance device of Huang in order to provide the user with an automatically variable magnetic resistance device thereby allowing a user to vary resistance without stopping exercise. Referring to claim 3, the modified Huang device further teaches a plurality of magnetic members movably mounted to the rotatable member wherein the magnetic members are movable relative to the stationary conductive member in response to variations in speed of rotation of the rotatable member. Referring to claim 4, the modified Huang teaches the rotatable member comprising a flywheel which can be mounted to a shaft interconnected with the roller, with the roller adapted to be engaged by the driven wheel of the bicycle. Referring to claims 8 and 26, the modified Huang teaches as broadly interpreted, the electrically conductive member comprising a disc-shaped member located adjacent the rotatable member and the magnets moving radially inward and outward in response to variations of speed by the user (see figs. 3-4 of Liou). Referring to claim 10, the modified Huang teaches the flywheel having angled vanes (Liou (21)). Referring to claim 11, the modified Huang further teaches the housing having a plurality of openings that allow circulation of air through the housing upon rotation of the rotatable member. Referring to claim 12, the modified Huang discloses the electrically conductive member comprising a primary wall located adjacent a side of the rotatable member and an outer flange located radially outwardly of the rotatable member. Referring to claim 13, the modified Huang teaches the magnets movably mounted to radially extended springs which bias the radial positioning of the magnets. Referring to claim 14, the modified Huang teaches the rotatable member formed of a non-magnetic material.

3. Referring to claims 16-20 and 25-27, the claims are substantially similar in scope to the above rejected claims. Please refer to the paragraphs above for discussion.

4. Referring to claim 21 and 28, Huang as modified by Liou above discloses the structural limitations as claimed. The method steps provided would have been obvious to one of ordinary skill in the art, as the method steps involve providing the claimed device, engaging the wheel of a driven bicycle with the roller, and rotating the bicycle wheel (riding) thereby inducing an eddy current and automatically variable resistance.

#### ***Allowable Subject Matter***

5. The indicated allowability of claim 11 is withdrawn in view of the newly discovered reference(s) to Huang and Liou. Rejections based on the newly cited reference(s) have been discussed above.

6. Claim 9 is allowed. See previous action for reasons for allowability. Claims 5-7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not adequately teach or make obvious the base limitations, and further disclosing the magnets disposed in an open groove and further having a retainer positioned over the open groove.

#### ***Response to Arguments***

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7. Applicant's arguments with respect to claims 1, 3-21, and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Minoura	U.S. 5,468,201
Peng	U.S. 6,345,703
Wei et al.	U.S. 5,851,165
Szu-Yin	U.S. 6,360,855
Lay	U.S. 6,468,186

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fenn C Mathew whose telephone number is (571) 272-4978. The examiner can normally be reached on Monday - Friday 9:00am - 5:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FCM  
fcm  
March 5, 2005

JEROME W. DONNELLY  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Jerome W. Donnelly', written over the printed name.